CLAIMS

1. An active-matrix image display device comprising:

- several light emitters (2; 52) forming an array of emitters distributed in rows and columns;

- power supply means (V_{dd}) capable of supplying current simultaneously to all of the emitters (2; 52) of a column during an emission step and a step of programming the emitters (2; 52);

- means (3) for controlling the emission of the emitters (2; 52) comprising:

- for each emitter (2; 52) of the array, a current modulator (14; 54) comprising a source electrode, a drain electrode and a gate electrode, a drain current (I_d) being able to pass through said modulator in order to supply said emitter (2; 52), for a voltage between the drain or the source and the gate equal to or greater than a trip-threshold voltage (V_{th}),

- for each column of emitters (2; 52), column address means (10; 60) capable of addressing in succession each emitter (2; 52) of said column of emitters by applying a value (I_{data}, V_{data}) representative of a data setpoint (U_c) to the gate electrode of the modulator (14; 54) associated with this emitter (2; 52), in order to actuate it, during a programming step,

- for each row of emitters (2; 52), row select means (8; 68) capable of selecting in succession the emitters (2; 52) of each row of emitters, during the programming step and

- for each modulator (14; 54), storage means (18) capable of storing electric charges at the gate electrode of the modulator (14; 54); and

- trip-threshold voltage compensation means (12) comprising comparators (28), the comparators (28) being capable of comparing, during the step of programming a selected emitter (2; 52), a value

representative of the drain current (I_d) supplying the selected emitter with the value (I_{data}, V_{data}) representative of the data setpoint (U_c) for controlling the quantity of charge stored in the storage means (18),
characterized in that the compensation means (12) comprise, for each column of emitters (2; 52), a single unit (26) for determining a representative value of the drain current (I_d) supplying the selected emitter (2; 52) on the basis of a measurement of a representative value of the current for supplying all of the emitters (2; 52) of the column.

2. The image display device as claimed in claim 1, characterized in that the power supply means (V_{dd}) for the emitters are connected directly to each modulator (14) of the control means.

3. The image display device as claimed in claim 1, characterized in that the power supply means (V_{dd}) for the emitters are connected directly to each emitter (2) of a column.

4. The image display device as claimed in any one of the preceding claims, characterized in that the power supply means (V_{dd}) for the emitters comprise a voltage supply generator capable of supplying all of the emitters of a column and in that the compensation means (12) are capable of compensating in succession the trip-threshold voltage (V_{th}) of each modulator (14; 54) of all of the emitters of a column.

5. The image display device as claimed in any one of the preceding claims, characterized in that the compensation means (12) further include:

- a drive generator (30) capable of generating

a drive signal (I_{data}) applied to the gate of said modulator (14; 54); and

- means (28, 34) for modulating the duration of said drive signal (I_{data}) according to the value of the data setpoint (U_c) and the value of the trip-threshold voltage (V_{th}).

6. The image display device as claimed in any one of the preceding claims, characterized in that the data setpoint (U_c) is a data voltage and in that the comparators (28) are capable of emitting a warning signal (S) when the voltage representative of the intensity of the drain current (I_d) is equal to a number of times said data voltage.

7. The image display device as claimed in claim 5 in combination with claim 6, characterized in that the means for modulating the duration of the drive signal (I_{data}) comprise:

- a switch (32) connected in series with the drive generator (30); and
- a control unit (34) capable of switching said switch (32), on the one hand, when the data setpoint (U_c) is received, and on the other hand, when the warning signal (S) is received.

8. The image display device as claimed in any one of claims 5 to 7, characterized in that the drive signal (I_{data}) generated by the drive generator (30) is amplitude-modulated according to the value of the data setpoint (U_c).

9. The image display device as claimed in any one of claims 5 to 8, characterized in that the drive generator (30) is a current generator and the modulator (14; 54) is capable of being current-controlled.

10. The image display device as claimed in any one of claims 5 to 8, characterized in that the drive generator (30) is a ramp voltage generator and the modulator (14; 54) is capable of being voltage-controlled.

11. The image display device as claimed in any one of the preceding claims, characterized in that the compensation means (12) further include a unit (26) for measuring the intensity of a current, capable of measuring the intensity of the drain current (I_d) passing through a selected emitter (2) during the programming step (C).

12. The image display device as claimed in claim 11, characterized in that the supply means comprise a line (4) to which the measurement unit (26) is directly connected.

13. The image display device as claimed in any one of the preceding claims, characterized in that the storage means comprise at least one storage capacitor (18) connected to the gate and to the source of the modulator (14) and in that the compensation means (12) further include reset means (36) capable of applying a voltage pulse to said capacitor in order to discharge it.